

Joint Event

# 36<sup>th</sup> World Pediatrics Conference

37<sup>th</sup> International Conference on

## Neonatology and Perinatology

August 07-08, 2023

Webinar



# Accepted Abstracts

## Management of acute respiratory infections (ARIs) in children - Nursing Perspective

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Acute respiratory infections are the most common causes of under-five morbidity and mortality in India. The government and private sectors have taken lot of initiatives in bringing down the number of deaths and hospitalizations due to ARI. The management involves a combination of supportive care, specific treatments based on the underlying cause of the infection, and preventive measures. ARIs can range from mild illnesses, such as the common cold, to more severe conditions, like pneumonia or bronchiolitis. It's important to note that the management may vary depending on the specific diagnosis and severity of the infection. Always consult a healthcare professional for personalized advice.

Here are some general guidelines: **Supportive Care:** Ensure the child gets enough rest and stays hydrated. Encourage frequent breastfeeding or fluid intake for infants, and offer plenty of fluids to older children. Adequate rest helps the body fight off the infection, and proper hydration prevents dehydration, especially if there is a fever.

**Fever Management:** If the child has a fever, acetaminophen or ibuprofen can be used under the guidance of a healthcare provider. Avoid aspirin in children due to the risk of Reye's syndrome.

**Steam Inhalation:** Steam inhalation may provide relief for nasal congestion, but it should be used cautiously to prevent burns. Make sure to supervise and maintain a safe distance from hot water.

**Nasal Saline Drops:** For infants or young children with nasal congestion, saline drops can be used to help clear the nasal passages and improve breathing.

**Antibiotics (if bacterial):** Antibiotics are not effective against viral infections like the common cold but may be necessary if a bacterial infection, such as bacterial pneumonia or a severe ear infection is present. The decision to prescribe antibiotics is usually based on the child's symptoms and clinical examination.

**Antiviral Medications (if viral):** In certain situations, specific antiviral medications may be prescribed for certain viral infections like influenza (flu). These medications work best when started early in the course of the illness, so prompt medical attention is essential.

**Cough Management:** Avoid over-the-counter cough and cold medications in young children, as they can have limited efficacy and may cause side effects. Instead, consider using honey (for children over one year of age) to soothe a cough or other age-appropriate remedies recommended by a healthcare provider.

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**Hospitalization (if needed):** In severe cases, such as severe pneumonia or respiratory distress, hospitalization may be necessary for monitoring and advanced medical care.

**Preventive Measures:** Encourage proper hand washing to reduce the risk of transmission of infections. Immunization against preventable diseases like influenza and pertussis (whooping cough) is also essential to reduce the severity and spread of respiratory infections. Remember that self-diagnosis and self-medication are not recommended, especially in children. If your child has symptoms of an acute respiratory infection, it's important to consult a healthcare professional for proper evaluation and management. They can provide accurate diagnosis, appropriate treatment, and guidance on home care. The speaker would high light on the intensity of the problem in India and the management modes including nursing care.

## Immune, infectious and epidemiological aspects of COVID-19 vaccination

**Darko Richter**

University Hospital Center, Croatia

**Statement of the Problem:** The initial COVID-19 vaccination campaign did not meet expectations due to errors in the roll-out strategy that did not take into account the incubation, index of reproduction, and duration of humoral immunity.

**Purpose:** To point out the factors those were neglected in creating the COVID-19 vaccination strategy.

**Methodology:** Critical observation of what has been done in comparison to what should have been taken into consideration from the outset.

**Observations:** It has been known for at least 50 years that humoral immunity following a 2-dose primary immunization last 4-6 months. Thereafter, short-incubation diseases (<8-9 days) need periodic boosting to maintain a steady protective antibody titer. In long-incubation infections, there is enough time to mount an anamnestic response to avert clinical disease, and boosters are not indispensable. Unless the herd immunity of 45% population had been attained during the B1 strain (reproduction index 1.8) predominance in Europe, no interruption of pandemic spread could have been hoped for. Instead, the pandemic spread on, “breakthrough” infections were infections that appeared after the waned specific antibody titers, and new variants allowed to boom with immune evasion and increasing reproduction index and transmissibility. Moreover, it was not appreciated that more generous spacing between the doses increased immunogenicity and that a single vaccine dose at the appropriate (3-6 months) post-recovery interval induced powerful hybrid immunity. Indeed, as of mid-2022, mRNA vaccines have been offered as a series of 3 doses at intervals of up to 8 weeks for the primary series, and at least 5 and 4 months for doses 3 and 4, respectively.

**Conclusions and Significance:** COVID-19 pandemic could have been controlled in the initial phases of the vaccination campaign if a faster roll-out or a 3-dose schedule had been adopted from the outset.

## Children, sickle cell anemia, expected death: The psychological impact on mothers and fathers and their inability to treat

**Fawzi Algadri**

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Children who suffer from sickle cell anemia, and there are more of them here. They are liable to die at any moment without realizing it, but here lies the major problem with the great psychological impact of the father and mother who realize that their son or children will leave them one day, in succession. It is a feeling mixed with pain, confusion and frustration for the parents. But it is somewhat mitigated by the fact that the children are unaware of what awaits them. Therefore, when you look, they smile and laugh at you, the pain squeezes inside you, and you see the children's innocence gradually withering in front of your eyes as a doctor, so how will it be in front of the mother and father? The psychological suffering of the father and the father needs great psychological support in order to prevent reaching addiction to what relieves them of feelings. Here they resort to khat, which is a narcotic plant that contains Cathinone (an amphetamine-like stimulant).

It is classified by the World Health Organization among narcotic herbs, and it is very, expensive and affects the level of family income, and therefore the results of addiction to it lead to bad results in children's nutrition on the one hand, and also from the psychological aspect of the father and mother on the other hand. These children suffer from pain on a semi-monthly basis, if not weekly, and they need medication daily. Of course, the costs of medication are high, and the income of families is very little, if not non-existent for some. In the meantime, what is the position of the father and mother when they see their son or children in pain and cannot help them because of their inability to buy medicine? It is a painful, frustrating, cruel feeling that squeezes the heart of the father, so he looks at the sky confused, while the mother sheds tears and weeping.

The father and mother resort to consuming khat to escape from the painful reality in their lives, which leads to a further deterioration of the health of the children and weakens the financial condition of the family. As for the mother and father, addiction to khat causes many psychological problems. The purpose of my words, as a pediatrician, is to study an existing situation that I see increasing day by day. It has psychological repercussions on fathers and mothers, as well as on affected children after they reach adolescence and begin to realize the problem and its repercussions, and the impact of bullying by their schoolmates on them, and these children cannot continue studying as a result of repeated bouts of illness, which makes them lag behind others in studying. Addiction to khat has led to the emergence of many cases of psychological depression among mothers and fathers. The results of the treatment are not satisfactory because it is difficult to obtain medicines due to the high cost and the inability to buy. The number of those who suffer from a psychological impact is very large, according to the statistics of our fellow psychiatrists.

## Mother to child transmission rate of hepatitis B after tenofovir disoproxil fumarate implementation in Thailand

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The Hepatitis B virus remains a major public health problem worldwide, especially in developing Asian countries. Thousands of Thai children under 5 have HBV from mother-to-child transmission. 90% of HBV-infected infants develop hepatic cancer. Since 2017, Thai national guidelines recommend mothers with high viral load or HBeAg positivity use TDF to prevent HBV transmission to their children. However, many Thai mothers do not receive treatment to prevent mother-to-child transmission. This study evaluated Mother-to-Child Transmission rate and factors (MTCT). The retrospective cohort study evaluated 342 women with hepatitis B were studied. From 2018 to 2020, the mothers must be HBsAg-positive. TDF is used for MTCT.

Collected information such as underlying disease, ANC visit, HBeAg status, viral load level and mode of delivery, infant's body weight, active-passive immunoglobulin and breast milk status. Multivariable binary regression was used to evaluate MTCT and risk factors. There were 42.40% (145) infants born from mothers who received TDF and 57.60% (197) infants born to non-TDF-used mothers. 52.92 percent were uninformed that they had hepatitis B and more than half (52.34 percent) were diagnosed as hepatitis B positive during their pregnancies. All 342 infants received hepatitis B vaccine at birth, 323 infants received Hepatitis B Immune Globulin (HBIG) and hepatitis B vaccine and 5.56% (19) did not receive Hepatitis B Immune Globulin (HBIG). The overall MTCT incidence rate is 0.88 percent, the MTCT rate among TDF mothers is 0.69 percent and the MTCT rate among non-TDF mothers is 1.02 percent. However no association between risk factor and MTCT among mothers HBsAg positive. In HBsAg-positive mothers, TDF reduced mother-to-child transmission (0.69 vs. 1.02). In uninfected infants, TDF efficacy is 32% and relative risk is 0.679%. No mother-to-child transmission of hepatitis B occurred because all infants received HBIG. TDF was not associated with mother-to-child hepatitis B transmission.

## Renal vein thrombosis in neonates with acute kidney injury; optimizing doppler ultrasound to facilitate early detection

**Silvie Hitmarova**

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**Background:** Renal vein thrombosis (RVT) usually presents in the first month of life and is associated with acute kidney injury (AKI). This case series examines five cases of RVT that occurred in a large tertiary neonatal intensive care unit in the Northwest of England between 2019 and 2022.

**Methodology:** Retrospective data was gathered using the Badgernet EPR and PACS electronic system.

**Results:** Initial indications for the renal ultrasound (USS) range from an echo showing an inferior vena cava (IVC) thrombus (n=2) to left renal flank mass (n=1) to reduced urine output and rising creatinine (n=1) to the thrombus being an incidental finding (n=1). AKI occurred in 3 cases. The median day of AKI diagnosis was day 12.5 (11-14), the median age of the 1st USS in these cases was day 18 (7-18) and the median age for the diagnosis of RVT was day 18 (8-27). The cardinal features of RVT triad only presented in one patient. Two cases had USS done after a 2<sup>nd</sup> episode of AKI. One patient was a female, the rest were males. 60% (n=3) of the patients were born prematurely, median gestation of this group was 31+4 weeks (23+2-37+3). In two cases, there was bilateral RVT with an occlusive IVC thrombus, both had USS after second episode of AKI. Three cases required anticoagulation or thrombolysis with no immediate treatment complications. One patient developed subretinal haemorrhages and bruising whilst on subcutaneous enoxaparin. One patient never received heparin due to thrombocytopenia and subsequent death.

**Conclusions:** The data imply that there should be a higher index of suspicion and an earlier USS and doppler in cases of AKI. A prospective study with larger number of patients is required to confirm this relationship.